



**United States Department of Agriculture
Natural Resources Conservation Service**

Energy Enhancement Activity - Renewable Energy Generation

Energy Resource Concern

More farmers and ranchers are becoming aware of rising energy prices. These costs now play a major role in whether some farmers are able to stay in business. This heightened awareness has created many new opportunities for reducing energy costs.

Awareness is also increasing on the impacts that fossil fuels are having on the environment. From exploration to combustion and all phases in-between -- fossil fuels and their impacts on the environment are facing greater scrutiny. Alternatives to conventional energy sources are rapidly being evaluated and deployed.

Benefits

Gaining energy efficiency can create significant savings -- up to a point. At some level of achievement, conservation is no longer enough. It is at this point if not before, that farmers and ranchers should consider using renewables for their energy needs. For many farmers and ranchers, renewable energy sources such as wind turbines, solar panels, and small hydropower systems can generate enough power to meet some, or all of their operation's needs. Currently, only 2 percent of the total energy consumption in the United States comes from clean, renewable resources, but the potential power output of renewable energy resources is significant.

Criteria for Renewable Energy Generation Enhancement Activity

A wind turbine, a solar panel, and/or a small hydro system (residential uses are excluded) are used to generate electricity for some or all agricultural operations.

- In the case that an operator has more than one renewable system (eg. a wind turbine and a solar panel) each system is eligible for a separate payment. However, two renewable systems that are alike (eg. two separate solar panels) and that are providing electricity for the same facility or use are not eligible for separate payments.

Reference:

http://www.nrel.gov/science_technology/

<http://www.eere.energy.gov/greenpower/>

Svejkovsky, Cathy, 2006, Renewable Energy Opportunities on the Farm, ATTRA Publication <http://attra.ncat.org/attra-pub/PDF/energyopp.pdf>